

## REMARKS

Claims 1-27 and 30-50 are pending in this application. Claims 28-29 have been cancelled without prejudice or disclaimer in response to the Examiner's restriction requirement. Applicant elects prosecution of pending claims 1-27 drawn to a sound masking system, and reserves the right to file one or more continuation applications directed to the subject matter of claims 28-29. As also indicated and shown above, new claims 30 to 50 have been added to the subject application.

Claims of the subject application have been provisionally rejected under the judicially created doctrine of obviousness type double patenting based on the claims of co-pending application no. 10/618,635. Additionally, claims of the subject application are provisionally rejected under the judicially created doctrine of obviousness type double patenting based on the claims of co-pending application no. 09/791,802. Submitted concurrently with this Amendment are terminal disclaimers associated with these two applications. Thus, these obviousness type double patenting rejections have been rendered moot. The applicants respectfully request that they be withdrawn.

The Examiner rejected claim 2 under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 1 has been amended to rectify the indefiniteness noted by the Examiner. Specifically, the second communication interface introduced in claim 1 is changed to "a network interface". Claims 20 and 24 have been amended in a similar fashion. Claim 24 has also been amended to correct a typographical error and provide a proper antecedent basis for the term "physical space". Claim 10 has been amended to rename "a communication interface" to "a computer interface".

The Examiner has rejected claims 1-9, 17-21, and 23-27 under U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,686,693 to Ritter (hereinafter "Ritter"). The Examiner's characterizations of Ritter and the subject invention have been carefully considered. However, the rejection is respectfully traversed for the reasons that follow.

Independent claim 1 recites a sound masking system for controlling the ambient noise level in a physical environment. The sound masking system comprises a communication network spanning at least a portion of said physical environment, a plurality of sound masking units, and a control unit. The sound masking units including a communication interface for coupling the sound masking units to the communication network for receiving control signals over the communication network. The control unit has a network interface for coupling the control unit to the communication network for transmitting control signals over the communication network to the sound masking units.

Ritter does not disclose or teach each and every element of the sound masking system as defined by independent claim 1.

First, Ritter does not disclose or teach a communication network. According to Ritter the sound masking units operate individually and are not coupled together through a communication network. In other words, Ritter does show any networked arrangement between the individual sound masking units. Furthermore, based on a careful reading of Ritter nowhere is the "transmission of a radio signal to receiver 60" referred to or characterized as a "network".

Second, Ritter specifically teaches at Column 7, line 63 to Column 8, line 4 that the hand held unit (100) operates at relatively low power and relatively low frequency to limit the range of control to 8-10 feet, but according to Ritter the individual sound masking units (84) are installed 16 feet apart (Column 7, lines 65-67). The reason for this is to avoid interaction

with sound masking units outside the control radius, i.e. 8-10 feet, as stated by Ritter at Column 8, lines 1-4. This means that the system according to Ritter is intended for point-to-point communication between the hand held unit 100 and one sound masking unit 84, even though multiple sound masking units are installed in an office space. In other words, the arrangement disclosed and taught by Ritter is very much like a television set and a compatible or universal remote control unit for changing the volume and the channels for that television set. Even if a household has more than one television set, the universal remote unit is not intended to control more than one television set at a time, nor can it be said that the television sets are connected in a communication network because they are able to receive control signals from the universal remote. The point-to-point nature of Ritter is further emphasized by the lack of an addressing capability in the sound masking units. According to Ritter, the sound masking unit includes a RF receiver which will receive the signal transmitted by the hand held unit provided the unit is within the control range, i.e. 8-10 feet, and therefore there is no differentiation between individual sound masking units. At most, Ritter teaches a control unit with a dedicated communication channel for controlling the volume of one sound masking unit at a time. With respect, it is submitted that the point-to-point communication channel disclosed and taught by Ritter is not the same as the communication network recited in claim 1.

Third, according to Ritter, the communication (network) interface described for the hand held unit 100 comprises an antenna and a RF transmitter (120) and the communication interface for the sound masking unit (84) comprises an antenna (128). As discussed above, such an arrangement is consistent with Ritter's teachings of providing a point-to-point or single communication channel configuration between the hand held unit and the sound masking unit. It will be further appreciated that such an arrangement does not provide the

capability for bidirectional communication between one or any of the sound masking units and the hand held unit.

Fourth, as discussed above, Ritter discloses and teaches a point-to-point communication configuration between the hand held unit and one of the sound masking units. Even if it accepted for argument sake that a single communication channel forms a communication network, Ritter is still limited to transmitting control signals to one sound masking unit at a time, and not a plurality of sound masking units as recited in clause (c) of claim 1.

In view of these differences, Ritter does not disclose each and every feature as recited in independent claim 1, and therefore claim 1 is not anticipated or rendered obvious by Ritter. Since claims 2-9 and 17-19 depend either directly, or indirectly, from claim 1, it is submitted that these claims are patentable for at least the reasons stated above with respect to claim 1.

For the same reasons as discussed above with respect to independent claim 1, it is submitted that independent claim 20 is patentable for at least the reasons stated above with respect to claim 1. Since claim 21 depends from independent claim 20, it is submitted that claim 21 is patentable for at least the reasons stated above with respect to claim 1.

Independent claim 24 recites a networked paging system comprising a communication network spanning at least a portion of a physical environment, a plurality of speaker units, and a control unit. The speaker units include a communication interface for coupling the speaker units to the communication network. The communication interface has an address component for recognizing control signals and a paging signal for announcement at the speaker unit intended for the speaker unit associated with the address component. The control unit has a communication interface for coupling the control unit to the communication network for transmitting control signals over the communication network to the speaker units

associated with the address component. The control signals include signals for selectively controlling the operation of the speaker units. The control unit includes an address generator for assigning addresses to the speaker units.

It is submitted that Ritter does not show or teach “an address generator for assigning addresses to said speaker units” as defined in clause (d) of independent claim 24.

As a preliminary point, it is noted that the Examiner makes reference to the paging system shown in Fig. 7, but also relies on the hand held unit (100) described for the sound masking system in Figs. 1 to 6. Based on a careful reading of Ritter, there is no defined relationship between the hand held unit (100) and the paging system of Fig. 7. As such it is submitted that the hand held unit (100) is being applied out of context to independent claim 24.

Notwithstanding the ambiguity concerning the characterization of a “control unit” in the context of claim 24, it is submitted that neither the hand held unit (100), nor the office telephone system (94), nor the encoder and modulator (78) if taken as the “control unit” comprise “an address generator for assigning addresses to said speaker units” as recited in claim 24. While Ritter makes a general comment at Column 8, lines 37-40 to “addressing circuitry” in the encoder and modulator (78), the addressing circuitry is to identify particular zone units or groups of zone units. As such, Ritter teaches using addressing to define paging zones. This is not the same as generating an address to identify an individual speaker unit, or the function of assigning addresses to the speaker units.

In view of these differences, it is submitted that claim 24 is not anticipated or rendered obvious by Ritter. Since claims 25-27 depend either directly, or indirectly, from independent claim 24, it is submitted that these claims are patentable at least for the reasons stated above with respect to claim 24.

The Examiner rejected claims 10-16 and 22 under 35 U.S.C. § 103(a) as being obvious in view of Ritter combined with U.S. Patent No. 5,386,478 to Plunkett (hereinafter "Plunkett"). Applicants respectfully traverse.

The Examiner's assertion that it would have been obvious to modify Ritter with the teachings of Plunkett is respectfully traversed. Ritter is directed towards a masking apparatus for producing an incoherent white or pink noise signal. Plunkett, on the other hand, is concerned with automatic adjustment of a stereophonic system for optimal sound quality as perceived at a particular listening location. At Column 5, lines 56-64, Ritter explicitly states that "limiting the operation of controller (100) to a short range allows the office manager or the like to physically move through the zones of masking and to control the operation of the individual units to achieve both custom operation as required for individual and to account for any acoustic sinks such as rugs or furniture in the zone, and also to achieve a smooth transition between zones." Ritter comprehends manual adjustment to account for custom operation to meet individual preferences and the nuances of each particular office. The noise meter (104) taught by Ritter is merely an analog meter intended to display to the user of the hand held controller (100) the noise level in decibels. In contrast, the teachings of Plunkett are directed towards automatic adjustment means. Ritter explicitly teaches away from the automatic adjustment means taught by Plunkett. In fact, if the manual adjustment means of Ritter was modified using the automatic adjustment means of Plunkett, it would render the invention of Ritter unsuitable for its intended purpose, because the modified invention could no longer tend to individual preferences through manual adjustment. It is therefore submitted that there is no motivation for one skilled in the art to combine the teachings of Ritter with Plunkett, and therefore the invention as defined by claims 10-16 and 22 are not obvious.

Furthermore, even if one skilled in the art were to combine the teachings of Ritter and Plunkett, the resulting sound masking system is not the same as that defined by claims 10/1 and 14/1 for the reasons as discussed above with reference to independent claim 1 and therefore claims 10 and 14 are not obvious. Since claims 11-13 and 15-16 are dependent claims, it is submitted that these claims are also not obvious for the same reasons. Similarly, claim 22 depends from claim 21/20, it is submitted that claim 22 is also not obvious for the same reasons.

**CONCLUSION**

In view of the above amendments and remarks, reconsideration of the various objections and rejections and allowance of claims 1-27 and 30-50 are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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